METHODOLOGY

Study Area

The GYTS was carried out in two regions of Uganda-Central and Northern regions purposively selected. In Central region the GYTS was carried in all the districts-but with more schools selected in Kampala district and Mpigi district because of having the highest number of secondary schools country wide, urban and location of the tobacco company, assuming high levels of consumption. Arua district-Northern region was selected because it is the main tobacco-growing district in the country.

Sample Design

The GYTS survey sample design was a two-stage cluster design. In the first stage of sampling, public and private secondary schools with Senior One-Three classes were selected randomly with a probability proportional to enrolment size. Schools with big enrolment size had a greater chance of being selected (See Appendix 1 list of selected schools). Enrollment data was obtained from Ministry of Education and Sports. A total of 85 secondary schools were selected, with twenty-five schools from Arua district and twenty schools from each of the three districts of Kampala, Mpigi and Rest of Central districts (Table 1).

Table 1: Study sample sizes among schools and students

Region	District	No. of schools in the sample	No. of students selected (Senior 1-3)
Northern	Arua	25	2,166
Central	Kampala	20	3,284
	Mpigi	20	2,505
	Rest of Central Districts	20	2,435
Total		**85**	**10,390**

The second stage consisted of systematic equal probability sampling. Classes (Senior One to Senior Three) were randomly selected from within the selected schools and all the students within the selected class were eligible to participate in the survey. The number of eligible classes/streams ranged from 3 to 15 in schools.

The questionnaire

A self–administered questionnaire was used for data collection. The Ugandan version consisted of 58 questions with core questions adopted from a questionnaire developed by WHO/TFI and UNICEF. Issues explored included: prevalence of tobacco use, access and availability of tobacco products, perceptions and attitudes, cessation, media and advertising, environmental tobacco use, and school curriculum on tobacco related issues. Various consultative meetings were held with WHO, Ministry of

Health, The Environmental Action Network (TEAN) and the Research Team to review the 'core' questionnaire. In addition, pre-testing of the questionnaire with students (Senior One-Senior Three) through self-administering of the questionnaire and group discussion was carried out to determine its relevance and applicability in relation to the Ugandan situation.

Data collection

A Research Team of thirty-five people (thirty Survey Administrators, four Supervisors and one Coordinator) was selected to implement the Global Youth Tobacco Survey (GYTS) in Uganda from July 15 to August 2, 2002. The team comprised of members from the Uganda Parliamentary Research Service and Ministry of Health. Prior fieldwork, logistical and administrative preparations were made as follows.
– Obtained information on school enrolment and geographical location of schools.
– Pre-visits to districts and school head-teachers to obtain permission conduct the survey and obtained lists of eligible classes for each schools.
– Obtained and reviewed /existing data on tobacco-related issues
– Held training workshops with supervisors and survey administrators in the two regions.

For purposes of data quality and management, Supervisors and Survey Administrators were provided with survey procedures and instructions. Answer sheets, header sheets, school and classroom-level forms used to capture information from students and enrolment data were edited at the end of each day of fieldwork. The district research teams also met regularly to discuss the day's activities and plan for the following day's work. The Research Coordinator collected all fieldwork data- the answer Sheets and enrolment data, did final editing, packaging and couriered it to CDC, United States of America.

Data Analysis

To analyze the survey data, Epi Info:C-Sample and SUDAAN, software packages for statistical analysis of correlated data, were used to compute prevalence rates and 95% confidence intervals for the estimates. Differences between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap. A weighting factor was applied to each student's questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The weight used for estimation was given by:

W= W1*W2*f1*f2*f3*f4

Where,

W1 = the inverse of the probability of selecting the school.

W2 = the inverse of the probability of selecting classroom within the school.

f1= a school-level non-response adjustment factor calculated by school size category (small, medium, large).

f2= a class adjustment factor calculated by school.

f3= a student-level non-response adjustment factor calculated by class.

f4= a post stratification adjustment factor calculated by gender and grade.